

FLEXURELESS MAGNETIC MICROMIRROR ASSEMBLY

ABSTRACT OF THE DISCLOSURE

A micro-optical switch including a flexureless magnetic micromirror hinged centrally over a pin, cone or the like. The pin, cone or the like allows the micromirror to rapidly switch or tilt into a plurality of predefined positions as accurately controlled by an microelectromagnetic assembly. A liquid surrounds the pin or cone, connects the bottom of the surface of the mirror with the substrate supporting the pin or cone, and provides a capillary force holding the mirror onto the pin or cone. The liquid low vapor pressure also dissipates heat generated by the fiberoptic beam reflecting off the top surface of the micromirror.

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